Resources to Green Commercial Buildings

There are a variety of features that can help green commercial buildings, improve performance, increase comfort and improve health and safety. The following resources provide a general overview of the key elements of green construction and renovation.

Overview

- <u>The U.S. Green Building Council's</u> Leadership in Energy and Environmental Design (LEED) green building certification program.
- The <u>Green Building Certification Institute</u> (GBCI) provides third-party LEED certification services for buildings and professional credentials.
- The Whole Building Design Guide is a comprehensive, internet-based portal to a wide range of federal and private sector building-related guidance, criteria and technology.
- <u>Harvard Green Building Resources</u> provides a green road map to LEED, sample owner's project requirements (OPR) and RFP language, and specifications.
- <u>Portland's Green Tenant Improvement Guide</u> provides practical measures for designing and constructing a
 workspace that conserves natural resources, saves money and is healthier for employees. This guide emphasizes
 measures that are typically controlled by building tenants rather than building owners or managers.
- American Society of Landscape Architects Sustainability Toolkit provides links to a variety of sustainable guides and case studies
- Green building incentives and tax credits
 - o Rockville High Performance Tax Credit for Existing Commercial Buildings
 - o Montgomery County Green Building Tax Credit (new and existing buildings)
 - o Database of State Incentives for Renewables and Efficiency

Sustainable Sites

Sustainable site development involves the wise selection of a site that minimizes environmental impacts, reduces emissions associated with transportation, implements sustainable landscape practices that reduce resource consumption and restores natural areas, manages stormwater runoff, reduces the heat island effect and eliminates light pollution.

- Rockville Stormwater Management documents and forms
- Maryland Department of the Environment's <u>Stormwater Design Manual</u>, <u>Volumes I & II</u>
- Montgomery County stormwater management facility design specifications.
- The National Parks Service's <u>Native Plants for Conservation Landscaping</u> provides a list of native plants for this area.
- Rockville's Invasive Plants
- National Park Service and U.S. Fish and Wildlife Service Plant Invaders of Mid-Atlantic Natural Areas



- Transportation: Rockville is served by numerous transportation systems to accommodate those who choose to travel without a car.
 - Transit Opportunities
 - Bicycling Opportunities
 - For the purposes of LEED, low-emitting and fuel-efficient vehicles are defined as vehicles classified as Zero Emission Vehicles (ZEV) by the <u>California Air Resources Board</u> or having achieved a minimum green score of 40 on the American Council for an Energy Efficiency Economy (ACEEE) annual vehicle rating guide.
- Green Roofs provide a variety of benefits, from reduced energy use, air pollution and greenhouse gas emissions to enhanced stormwater management and water quality. The U.S. EPA provides a variety of green roof resources.
- The US EPA <u>Urban Heat Island Mitigation</u> website includes four key strategies: 1) trees and vegetation; 2) green roofs; 3) cool roofs; and 4) cool pavements.

Water Conservation

• <u>WaterSense</u> is a partnership program sponsored by the U.S. Environmental Protection Agency, making it easy to save water and protect the environment. Look for the WaterSense label to choose quality, water-efficient products.

Energy Efficiency and Atmosphere

Efforts to address energy reliability and affordability, slow the depletion of the ozone layer, and mitigate climate change focus on energy demand, energy efficiency, renewable energy and ongoing energy performance.

- The <u>building commissioning process</u> focuses on verifying and documenting that the facility and all of its systems and assemblies are planned, designed, installed, tested, operated and maintained to meet the Owner's Project Requirements.
- <u>Clean Energy</u>, learn more about what it is, how much it costs, and how you can purchase clean energy.
- Green-e Energy is a voluntary certification and verification program for renewable energy products.
- Database of State Incentives for Renewables and Efficiency (DSIRE)
- Maryland Energy Administration's business incentives for green building, energy efficiency, and clean energy.
- <u>Pepco's Commercial and Industrial Energy Savings</u> program offer a variety of incentives for commercial customers.

Materials and Resources

Buildings generate a large amount of waste throughout their life cycles, from construction to building operation to demolition. Green building addresses waste management and life-cycle impacts.

- Montgomery County <u>Building Materials Recycling and Disposal</u>
- Montgomery County administers its commercial and multi-family dwelling recycling program within Rockville's limits. For more information on recycling requirements for commercial and multi-dwelling homes visit the following:
 - Business Recycling and Waste Reduction
 - Think Reduce and Recycling at Apartments and Condominiums



- Montgomery County Division of Solid Waste Services, "<u>How to Recycle/Dispose of ...</u>" provides recycling and disposal tips for a variety of household items.
- The Metropolitan Washington Council of Governments compiled a convenient guide to identify businesses in the
 area that reuse or recycle construction materials or provide construction materials recovery services. The
 directory is not intended to be exhaustive and does not represent an endorsement for any of the listed products and
 services.
 - Builders Recycling Guide
 - Guides and Resources for Construction Waste Reuse and Recycling
- Forest Stewardship Council (FSC) certified wood promotes sustainable forest management worldwide.

Indoor Environmental Quality

Indoor environment quality is a major concern for buildings and the health, safety, and productivity of their occupants. Strategies reduce indoor air pollutants, ensure adequate ventilation of fresh air, and appropriate controls for thermal comfort, lighting and acoustics.

- <u>Green Seal</u> provides third-party certification of environmental friendly floor finishes, household cleaning products, paints and coatings.
- King County sample Indoor Air Quality Plan
- US EPA Building Air Quality: A Guide for Building Owners and Facility Managers
- Portland, Oregon sample Indoor Air Quality Plan
- The Carpet and Rug Institute offers the <u>Green Label and Green Label Plus</u> certification program for low VOC carpet, carpet backings, cushions and adhesives.
- Center for the Built Environment sample Occupant Indoor Environmental Quality (IEQ) Survey

